Title (en)

RETINAL LASER DOPPLER APPARATUS

Title (de)

LASER-DOPPLER-GERÄT ZUR UNTERSUCHUNG DER RETINA

Title (fr)

APPAREIL DOPPLER A LASER POUR LA RETINE

Publication

**EP 0543932 B1 19971112 (EN)**

Application

**EP 91916439 A 19910708**

Priority

- US 9104796 W 19910708
- US 56666890 A 19900813

Abstract (en)

[origin: US5106184A] A retinal blood flow velocimeter projects an illumination beam through a steering system onto a retinal vessel, and forms a separate tracking image back through the steering system. A fast tracking loop detects motion of the tracking image and moves the steering system to null image motion and keep the illumination beam centered on the vessel. The beam is reflected from the vessel, picked up by detectors at two fixed angles, and processed by spectral analysis. In one preferred embodiment the illumination beam and the steering system follow entirely separate paths through the steering system. Fiber optics translate the collected Doppler light without dispersion while preserving phase relationships, and absolute dimensions are determined from the image tracking electronics. A processor then computes volumetric blood flow which it compares with normative data.

IPC 1-7

**A61B 3/12**

IPC 8 full level

**A61B 3/10** (2006.01); **A61B 3/12** (2006.01)

CPC (source: EP US)

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Citation (examination)

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Designated contracting state (EPC)

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DOCDB simple family (publication)

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